High speed dome camera

User manual

※Please read the user manual carefully before use it；Please keep this manual for easy access when necessary.

Content

Chap.1 Foreword 2
Chap.2 Product overview 4
2．1 Product brief description 4
2．2 Performance characteristics 4
2．3 Function explanation 5
2．4 Technical parameter 7
Chap.3 Installation 7
3.1 Speed dome DIP switch settings 7
3.1.1 Enter DIP switch settings 8
3.1.2 DIP switch settings 8
Chap. 4 Speed dome basic opration 9
Chap. 5 Menu settings+ 11
5.1 Main menu 12
5.2 < CAMERA SETTINGS > 13
5.3 < OTHER SETTINGS > 13
5.4 < CAMERA LENS> 13
5.5 < DOME SETTINGS > 14
5.6 <MOTION SETTINGS> 15
5.6.1<PRESET SETTINGS> 16
5.6.2<CRUISE SETTINGS> 16
5.6.3<SCAN SETTINGS> 17
5.7 SYSTEM SETTINGS 18
5.7.1 DISPLAY SET 18
5.8 CLEAR MOTION 18
5.9 ADDRESS SETTINGS 19
Chap.6 Simple fault clearing and maintain 20
6.1 Simple fault clearing form 20
6.2 Notes 20
6.3 After service 21

Chap.1 Foreword

Before install and use high speed PTZ camera, please read below information carefully.

1. Before installation please read user manual carefully.

2. Please do not test and install the product on unstable flat，make sure the product place on a stable flat and assembly firmly before operation.

3. Prevent products damage caused by stress, severe vibration and immersion on transportation and storage.

4. Installation of this product must not be reversed；please handle with care，do not squeeze structural components，Otherwise, they may cause mechanical failure, affecting the overall performance. The transparent material on the speed dome iris is advanced optical materials，do not touch it, any scratches will affect image quality.

5. Prevent any foreign matter or liquid into camera, to avoid damage on camera.

6. When you make connection, please follow up safety standards, use with a dedicated power supply. RS-485 and video signal adopt TVS grade lightening protection technique, can effectively prevent damage caused by not more than 500W lighting, surging and other types of pulse signals. Please keep enough distance away from High-voltage equipment or cables when RS-485and video signals during transmission. Make lighting and surging protection measures when necessary.

7. Whether in use or non-use, never allow cameras aimed at the sun or other bright objects。Otherwise, may result in permanent damage of CCD

8. Do not use it exceed the temperature, humidity standards.

9. This product do not have user repair parts。When camera has fault，please do not repair it，should find out fault refer to user manual，if cannot find out reason, please send the camera to professional maintenance person. The maintenance person must be authorized by our company.

Chap.2 **Product overview**

2.1 Product **introduction**

High speed PTZ camera adopt the latest scientific and technological achievements, best manufacturing technique, successful developed by years of valued experience，it is a high-performance digital signal processing (DSP) camera which equips with automatic zoom lens；build-in PTZ and digital decoders，representing a new generation of high-tech monitoring products. It uses all-digital control, simple and ingenious design, discretional quickly locate and continuous follow-up scan, it has automatic tracking function，make smart surveillance of all-round, non-blind spot, Can automatically adapt to the environment and target distance changes in light and dark, High reliability and long-term stable operation, without maintenance.

High speed PTZ camera is compatible with a variety of control protocols, so it can support a variety of popular platforms. Match with other system，the connection use methods of different system is not the same, please contact the system manufacturer or distributors for necessary information.

The various characteristics of the high speed PTZ camera , make it applicable to large-scale industries, active target object surveillance。Such as power systems, telecommunications sector, banking security, factories and enterprises, intelligent buildings, intelligent community, urban road monitoring, airports, stations and other monitoring occasions.

2．2　Feature

1. Build-in OSD English menu, through menu to display and change the information and parameter of camera, can set and CALL presets, pattern scan, area scan and display area etc.
2. Integrated design, compact structure and high reliability.
3. 255 presets
4. Adopt RS485 control
5. Precision motor drive, running smoothly and responsive.
6. Horizontal 360℃continuous rotation, no surveilla nce blind area
7. Rotation speed automatic adjust according to lens' zoom
8. Vertical 90°，auto overturn 180℃continuous surveillance.
9. Auto focus, auto white balance
10. Backlight compensation, you can see all the objects in a strong light environment.
11. Auto-identify PELCO-D/P communication protocols, baud rate between 2400bps~19200bps optical
12. Wide Dynamic Camera Support（SONY1010、SONY490、SONY990）

2．3 Function

Below is a brief introduction of high speed PTZ camera main function, achievement and operation principles of each function, does not involve a specific method of operation.

1. Setup address code, baud rate, control protocol

Any operation commands has camera address code, baud rate and control protocol, any single camera only respond to its own address code, baud rate, control protocol command. The detailed setup ways of camera address code, baud rate and control protocol please refer to DIP switch settings.

2．Tacking

User can use the keyboard joystick to control the camera turning up, down, left or right, Can be used to track moving targets or moving horizon, in addition you can change the eyeshot size and image size by adjusting the focal length. In the auto-focus state, with the lens rotation, the camera will automatically quickly adjust according to scenery change, instantly get a clear picture.

3．Focal length / rotation speed automatic matching technique

Manual adjustment, in long focal length situation, high speed reflect makes image quickly move when a slight touch of joystick, resulting a data loss. Based on a humanized design, the PTZ camera can automatically adjust horizontal and vertical rotation speed according to focal length, so that manual operation is simple and easy to track targets.

4．Auto Invert

The operator pull the lens to bottom (vertical) and still hold the joystick, lens auto horizontal overturn 180℃then downward overturn 90°,direct see the back of scenery, achieve vertical 180℃full continuous monitoring.

5．Setup and CALL presets

Preset function means speed dome can store horizontal and tilt angle of platform as well as camera lens focal length and other parameters in memory, you can quickly CALL these parameters and adjust platform and camera to the location. User can easily and quickly control equipment to storage and CALL preset via keyboard and IP controller, this high speed PTZ has 256 presets.

6．Lens control

1）Focal length control

User can adjust the focal length via keyboard and matrix, in order to receive the necessary panoramic images or micro-lens image.

2）Focus control

System default auto-focus, zoom, camera lens will automatically focus to the centre of scene, keep

image clear; In exceptional circumstances the user can manually focus to achieve the desired image effect.

When in manual focus state, sway the control bar to restore the auto-focus. There are also a dedicated control commands or CALL a preset to restore auto focus.

The camera lens in the following situations will not auto focus:

a. The object does not in the centre of image;
b. The object in the near and far place at the same time;
c. The object is bright objects, such as neon lighting, spotlights;
d. The object is behind glass which with droplets or dust;
e. The object is moving too fast;
f. Large area object, such as wall;
g. Objectives are too dark or inherently dim.

7. Aperture control

User can manual adjust aperture size via keyboard in order to obtain the required image brightness.

8. Auto backlight compensate

When the backlight compensation function is open, camera lens in the light background can make auto brightness compensation to dark objective. Make adjustment to bright background, avoid a mass of brightness and object cannot identifiable because of darkness.

9. Auto white balance

According to the changes in ambient light, automatic adjustment, reproduce true color

10.Night vision function（B/W switch）

Camera with night vision function, at B/W mode, it will automatically switch CCD illumination according to environment light changes. For example, in the day, the light is adequate, use general illumination keep images colorful. At night it will auto change to low illumination, display scene clear in black and white image.

11. Auto Tour

Pre-set Tour presets, arrange some presets to Tour queue in order, only a command can make indoor intermediate speed dome constant movement in specified time interval according to presets order.

12. A-B Scanning

Through an external command or power-on or call free time Auto-running, it can make speed dome camera A-B Scanning continually in horizontal direction

13. 360℃Scanning

Through an external command or power-on or call free time Auto-running, it can make speed dome camera 360℃rotate continually in horizontal direction

14. Wide Dynamic

Support SONY newest FCB-EC490，FCB-EC990，FCB-EC1010 wide dynamic camera, applied in

strong cockfighting environments.

2．4 Technical parameter

Product Name	Intelligent High Speed Dome Camera
Product Model	VT-GV
PTZ Address	1～255
Communication Baud rate	2400／4800／9600／19200bps
Communication Mode	RS485 bus control
Communication Protocols	Recognize Pelco-P, Pelco-D automatically
Auto flip	Yes
System soft restart	Yes, recover to the status before power off automatically
System power-off protect	Yes
Auto-running during free time	Yes, preset ,A-B scanning, cruise scanning and so on
360°auto-scanning	Auto-adjust the scanning speed du ring zooming
Manual horizontal speed	0.5°～260°/s
Manual vertical speed	0.5°～180°/s
Rotation range	H: 0～360° V: 0 ～90°
Zoom self-adaption	auto-adjust the PTZ control speed during zooming
A-B scanning	4pcs
Presets	255(accuracy ±0.1°)
Preset speed	Max :280°/s
Preset residence time and preset speed	Preset residence time :0~255s Preset Speed: 1~63 speed level adjustable
Auto cruise	8pcs,each cruise line has 16presets
Anti-surge function	Three level anti-static, anti-surge, lightning protection
Power supply	DC12V
Work environment	-10℃～+55℃， ＜95%RH
Water-proof level	IP66
Dimension	6inch

Chap.3 Installation

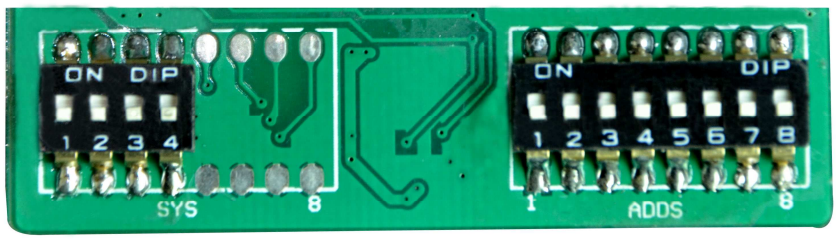
3.1 Speed dome DIP switch settings

High speed dome camera is compatible with a variety of control protocols, baud rate can be adjusted to make it compatible with more monitoring and control system。Before install the speed dome camera, please adjust the DIP switch to appropriate code according to your requirements, in order to adjust the

baud rate, control protocol, address code. If there are no special requirements, the speed dome factory default address code is 1, baud rate is 2400BPS corresponding code, and control protocol is PELCO-D corresponding code.

3.1.1 Enter DIP switch settings

Through DIP switch can change BAUD-RATE, PROTOCOL and ADDRESS. Speed dome core, housing and DIP switch pictures see picture 1.



Picture1 Dome core and DIP switch

3.1.2 DIP switch settings

SYS：Baud rate and control protocol switch

ADDS：Address code switch

DIP switch “ON” means “1”，DIP switch “OFF”means“0”， DIP switch left is low position ,right is high position

Baud rate and control protocol setting form：

SYS					
Code point	1	2	3	4	
Control protocol			OFF	OFF	self-adapting
			ON	OFF	PELCO-D
			OFF	ON	PELCO-P
			ON	ON	Reservation
BPS	OFF	OFF			2400
	ON	OFF			4800
	OFF	ON			9600
	ON	ON			19200

2. ADDS is used for setting speed dome address code。Address adopt binary mode, you can set at total 255 different speed dome address code, see address code table. The factory default setting is as below.

Address code	ADDS speed dome address code table							
	1	2	3	4	5	6	7	8
1- adapting	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
246	OFF	ON	ON	OFF	ON	ON	ON	ON
247	ON	ON	ON	OFF	ON	ON	ON	ON
248	OFF	OFF	OFF	ON	ON	ON	ON	ON
249	ON	OFF	OFF	ON	ON	ON	ON	ON
250	OFF	ON	OFF	ON	ON	ON	ON	ON
251	ON	ON	OFF	ON	ON	ON	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON
253	ON	OFF	ON	ON	ON	ON	ON	ON
254	OFF	ON	ON	ON	ON	ON	ON	ON
255	ON	ON	ON	ON	ON	ON	ON	ON

Chap. 4 Speed dome basic operation

Since different platforms of concrete operation methods are not identical, generally, should be based on the system manufacturer's operating manual prevail under different circumstances will have special requirements and methods of the operation, please contact the dealer to obtain the necessary information. Here only introduced the keyboard how to control the ball machine method.

1. Power on Self Test

After the speed dome camera power on, the camera process the horizontal and vertical movement by auto, through the self-test to determine speed dome camera work fine.

Control the camera rotation from top to bottom, right to left:

After selected one camera, you can manually control the speed dome camera top to bottom, right to left by the joystick .The joystick control the movement of the camera, when the joystick shake to the right, the camera is also to right. Similarly, when the joystick to the left, camera same too.

2. Preset setting

According to the following steps to set preset:

(1) Select the camera (more information please read control of the keyboard manual);

(2) Operation joystick, zoom button, focus button, buttons adjust the camera aperture screen;

(3) Press the number key ++SHIFT+ CALL (Enter the specified preset), save the preset scene parameters.

3. Call preset

Follow the below step to watch the preset:

（1）select the camera；

(2) Press the number key +CALL (enter the designated preset), the camera move to the present position immediately, the lens zoom, focus and aperture is also automatically change to the preset parameters; if the input is a special function of the preset (see "Preset function menu"), the speed dome camera will perform with special features preset of the corresponding functions (such as: Enter the 80 preset, the camera auto-tracking feature).

Preset function list

Special preset	Specific of function
CALL 64/95 PRESET	Enter dome camera menu
CALL 57 PRESET	Enter camera menu
CALL 56 PRESET /IRIS-	Mandatory exit menu
CALL 97/99 PRESET	Start Auto scan
CALL 96 PRESET OR OTHER PTZ CONTROL	Stop auto scan
CALL 49 PRESET	Start Tour function 1
CALL 50 PRESET	Start Tour function 2
CALL 51 PRESET	Start Tour function 3

CALL 52 PRESET	Start Tour function 4
SET 54 PRESET	Set left/right scan 1 start
SET 55 PRESET	Set left/right scan 1 end
CALL 54 PRESET	Start left/right scan 1
CALL 55 PRESET	Start left/right scan 2
CALL 61 PRESET	Reboot system
CALL 60 PRESET	Recovery default parameters
SET 64/95 PRESET, CALL 96 PRESET	Set signal system and the protocol of camera module

4．Close-up lens and wide-angle lens

Zoom adjustment, or to narrow the disparity between the camera lens, zoom in or out the scenery to get close-up and wide-angle effect. Hold down the ZOOM+ , the camera features are closer to the picture of the object is magnified; hold the ZOOM- , the camera features pulled away, the screen object has been reduced. If you press and quickly release the zoom button, the camera monitor screen only for small changes. The camera zoom changes depends on the length of time holding down the zoom button

.

5．Lens Focus Control

Focus is adjustable camera images of an object or scene in the clarity of the process. Hold down the FOCUS+ from the distant objects or scenes clear up near objects become blurred. Hold down the FOCUS-, proximity to clear up objects or scenes, distant objects become blurred. Focus button repeatedly until you adjust the monitor screen objects into clear from the ambiguity. The same as the zoom button, the camera focused vary depending on the length of time holding down the focus button.

6．Manual Iris Function

The camera aperture will change the brightness of the screen. Hold down the IRIS+ , the camera picture change to light, hold down the IRIS- , the camera screen change to dimmed. The same as the zoom button, the camera light dark vary depending on the length of time holding down the aperture button.

Chap. 5 Menu settings

This chapter will introduce the operation of OSD menu. Plug in power, after speed dome self-test, you will see below information:

SYSTEM INFOMATIO

Camera ID 1

Protocol PELCO-D

Baud Rate 2400

Cam Protocol 1

Version V601

Initializing.....

The information will always display before the operation.

Different surveillance systems has different operation ways, detailed operation please contact distributor. Here below is an easy introduction of control keyboard（our company product）to operate OSD menu.

1．Enter main menu: call No.64/ 95 preset, and you will enter OSD main menu. Shake left /right FOCUS+ /FOCUS-Is the enter key. IRIS-（iris close）is the exit key.

2．Enter other menu：Up / down shake the joystick, so that the cursor is pointing to a menu，press FOCUS+ enter the menu.

3．Function select：Up / down shake the joystick or press ZOOM+ / ZOOM-, so that the cursor is pointing to a menu，press FOCUS+ select this function.

4．Parameter select：Up / down shake the joystick or press FOCUS+/ FOCUS- to select the parameter

5．Restore settings：Press IRIS+ ,restore the settings，it is effective if has corresponding prompt.

6．Does not restore and back to last menu: press IRIS- back to last menu, it is effective if has corresponding prompt.

7．Exit menu: Up / down shake the joystick，so that the cursor is pointing to exit option, press IRIS+ exit OSD menu.

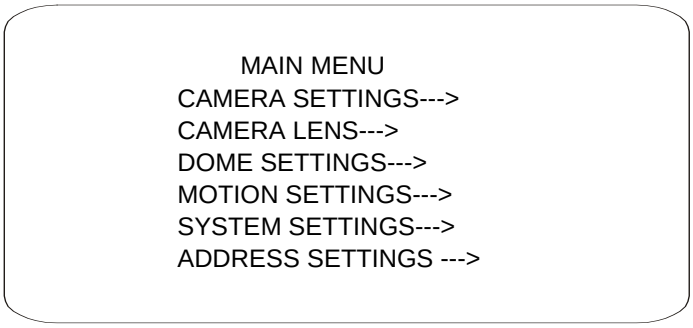
8．Back to previous menu：Up / down shake the joystick, so that the cursor is pointing to Return option，press FOCUS+ and back to previous menu.

Notes：Different speed dome setting, different display on speed dome.

The following is detailed description of use smart standard control keyboard to operate OSD menu:

5.1 Main menu

Speed dome work normally, call No.64/95 preset, enter main menu, screen display is as Picture 3.1



Picture 3.1 <MAIN MENU>

Main menu contents description：

< CAMERA SETTINGS>：

< CAMERA LENS >：

< DOME SETTINGS >：

<MOTION SETTINGS >：

< SYSTEM SETTINGS >：

< ADDRESS SETTINGS >：

<EXIT>：

1．On the picture 3.1MAIN MENU，Up / down shake the joystick or press ZOOM+/ZOOM-，so that the cursor is pointing to a menu item or function option；

2．Press FOCUS+，enter menu or operate a function option.

5.2 < CAMERA SETTINGS >

On the picture 3.1MAIN MENU，Up/down shake the joystick or press ZOOM+/ZOOM-,so that the cursor is pointing to CAMERA SETTINGS--->, press FOCUS+，enter picture 3.2 CAMERA SETTINGS.

CAMERA SETTINGS

CAMERA TYPE	AUTO
ZOOM SPEED	HIGH
DIGITAL ZOOM	ON
FOCUS MODE	AUTO
DAY/NIGHT	AUTO
BLC	OFF
FRAME PILE	OFF
OTHER SETTINGS	-->
RETURN	

Picture 3.2 < CAMERA SETTINGS >

<CAMERA SETTINGS>

CAMERA TYPE:

ZOOM SPEED：

DIGITAL ZOOM：

FOCUS MODE：

DAY/NIGHT ：

BLC ：

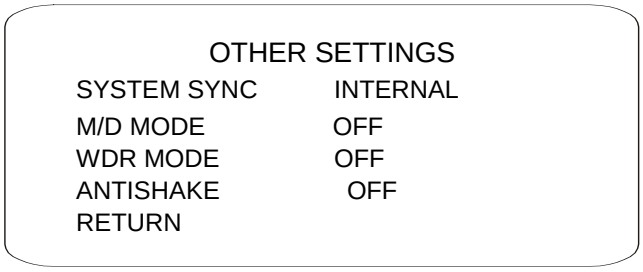
FRAME PILE ：

OTHER SETTINGS ：

RETURN：

5.3 <OTHER SETTINGS>

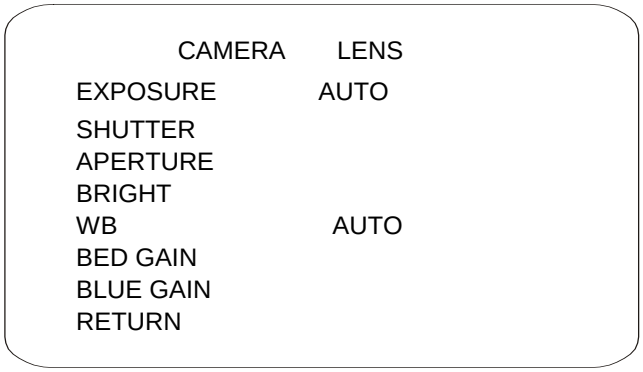
1. In the MAIN MENU(picture 3.1), rock the joystick up/down or press the key ZOOM+/ZOOM-, move the arrow to the AMERA SETTINGS--->, then press the key FOCUS+, enter OTHER SETTINGS to set the other parameter of camera module(picture 3.3)



<OTHER SETTINGS>
SYSTEM SYNC: INTERNAL/LINELOCK
M/D MODE: ON/OFF
WDR MODE： ON/OFF
ANTISHAKE：ON/OFF
RETURN：

5.4 CAMERA LENS

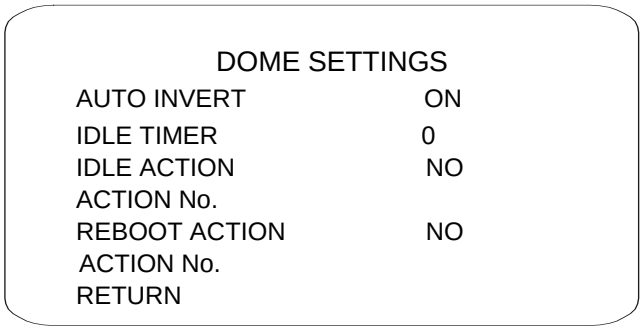
In the MAIN MENU(picture 3.1), rock the joystick up/down or press the key ZOOM+/ZOOM-, move the arrow to the CAMERA LENS--->, then press the key FOCUS+, enter CAMERA LENS to set the high parameter of camera module(picture 3.4)



<CAMERA LENS>
EXPOSURE: AUTO/AE PREFs/AI PREFs/BRIGHT
SHUTTER:
APERTURE：
BRIGHT ：
WB： AUTO/INDOOR/OUTDOOR/PUSH/
BED GAIN ：
BLUE GAIN:
RETURN：

5.5 <DOME SETTINGS>

On the picture 3.1 MAIN MENU, Up/down shake the joystick or press ZOOM+/ZOOM-,so that the cursor is pointing to DOME SETTINGS---> , press FOCUS+, enter 3.5 DOME SETTINGS

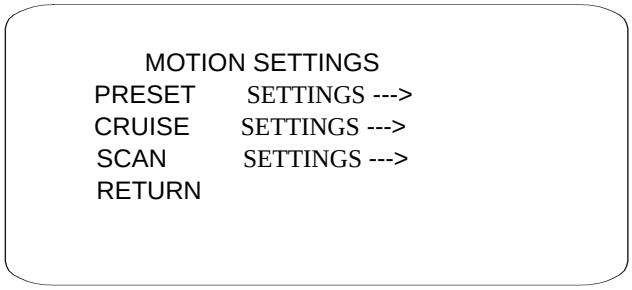


Picture 3.5 <DOME SETTINGS>

<DOME SETTINGS>
AUTO INVERT: ON/OFF
IDLE TIMER: 0~255,
IDLE ACTION: NO/PRESET/SCAN/ TOUR
ACTION No.:
REBOOT ACTI ON: NO/PRESET/SCAN/ TOUR /LAST STA
ACTION No.:
RETURN:

5．6 < MOTION SETTINGS >

On picture 3.1MAIN MENU，Up / down shake the joystick or press ZOOM+/ZOOM-, so that the cursor is pointing to MOTION SETTINGS-→ , press FOCUS+，enter picture 3.6 <MOTION SETTINGS>



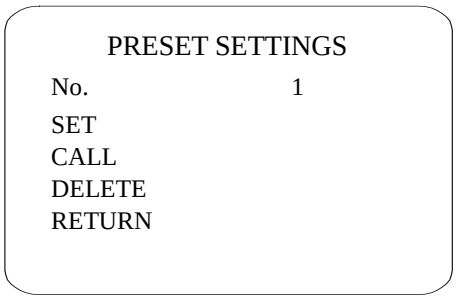
Picture 3.6< MOTION SETTINGS >

<MOTION SETTINGS>
PRESET SETTINGS：
CRUISE SETTINGS：
SCAN SETU SETTINGS P：
RETURN：
RETURN：

5.6.1 <PRESET SETTINGS>

According to the following steps to set preset:

On the picture 3.6< MOTION SETTINGS >，Up / down shake the joystick or press ZOOM+/ZOOM-,so that the cursor is pointing to PRESET SETTINGS--->；press FOCUS+ enter as follows

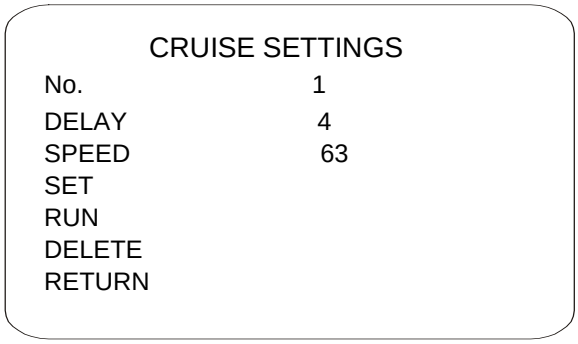


Picture 3.6.1 <PRESET SETTINGS >

< PRESET SETTINGS >
No.：
SET：
CALL：
DELETE：
RETURN:

5.6.2 < CRUISE SETTINGS>

On the picture 3.6 MOTION SETTINGS, Up / down shake the joystick or press ZOOM+/ZOOM-,so that the cursor is pointing to CRUISE SETTINGS press FOCUS+, enter picture 3.6.2



Picture 3.6.2< CRUISE SETTINGS >

<CRUISE SETTINGS >
No.：
DELAY： 0~255
SPEED： 0~63
SET：
RUN：
DELETE：
RETURN：

CRUISE RUN used to set lens auto execute preset track for scanning. The step as below;

1. On the picture 3.6.2< CRUISE SETTINGS >,Up / down shake the joystick or press ZOOM+/ZOOM-,so that the cursor is pointing to STAY DELAY [（S）0～255S],press

ZOOM+/ZOOM-, ,left/right shake joystick. Choose stay time.

2. And then, up/down shake the joystick or press ZOOM+/ZOOM-,so that the cursor is pointing to SET, press FOCUS+ enter, you will see NO.1~16 presets. left/right shake choose NO.1 preset, saved by IRIS+ ,back to picture 3.6.2，the same setting for No 2~16. preset track position can be changed by ZOOM+ ,saved by IRIS+

3. at last, up/down shake the joystick or press ZOOM+/ZOOM-, so that the cursor is pointing to CRUISE RUN.

5.6.3 <SCAN SETTINGS**>**

On the picture 3.6 MOTION SETTINGS, Up / down shake the joystick or press ZOOM+/ZOOM-,so that the cursor is pointing to SCAN SETTINGS, press FOCUS+, enter picture 3.6.3

SCAN SETTINGS
No. 1
MODE <180
SPEED 55
START SET
END SET
RUN
DELETE
RETURN

Picture 3.6.3 <SCAN SETTINGS>

< SCAN SETTINGS >
No.：
MODE：＞180°＜180°
SPEED： 0~63
START SET：
END SET：
RUN：
DELETE：
RETURN：

< SCAN SETTINGS > used to set the left/right scan, functions as follow

1．Choose the left/right scan No.

2．On the picture 3.6.3 left/right scan menu，Up / down shake the joystick, so that the cursor is pointing to <START POSTION>；

3. Press FOCUS+, enter scan origin, shake the joystick left/right origin position, press IRIS+ saved.

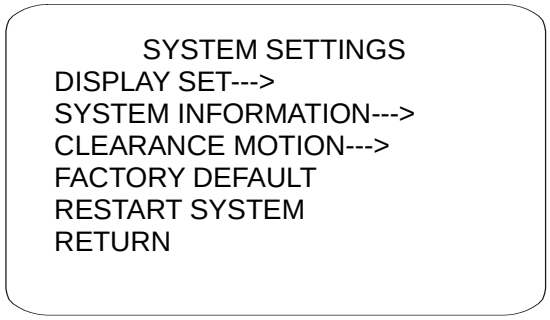
4. Up / down shake the joystick or press ZOOM+/ZOOM- so that the cursor is pointing to <END POSTION>；

5. Press FOCUS+, enter scan origin, shake the joystick to enter left/right scan of origin position. Press IRIS+ saved.

6. Up / down shake the joystick, choose the scan run, start left/right scan.

5.7 SYSTEM SETTINGS

On the picture 3.1MAIN MENU, Up down shake the joystick or press ZOOM+/ ZOOM-, so that the cursor is pointing to /SYSTEM SETTINGS, press FOCUS+, enter SYSTEM SETTINGS as picture 3.7

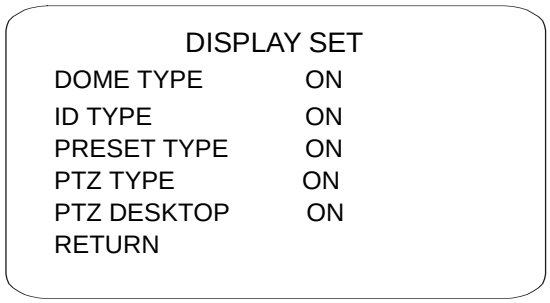


Picture 3.7 SYSTEM SETTINGS

< SYSTEM SETTINGS >
DISPLAY SET：
SYSTEM INFORMATION：
CLEARANCE MOTION：
FACTORY DEFAULT：
RESTART SYSTEM：
RETURN：

5.7.1 DISPLAY **SET**

On the picture 3.7 SYSTEM SETTINGS ， Up / down shake the joystick, so that the cursor is pointing to< DISPLAY SET>, press FOCUS+, enter DISPLAY SETTINGS as picture 3.7.1

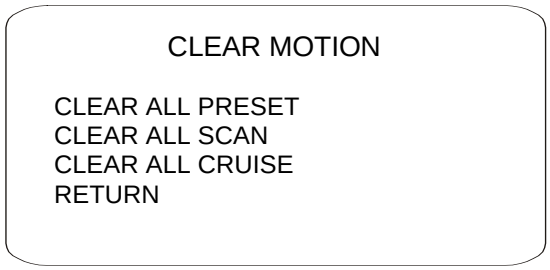


Picture 3.6.1 DISPLAY SET

<DISPLAY SET>
DOME TYPE： ON/OFF
ID TYPE： ON/OFF
PRESET TYPE： ON/OFF。
PTZ TYPE： ON/OFF
PTZ DESKTOP: ON/OFF/2S/5S/10S/30S/60S-
RETURN：

5.8 CLEAR MOTION

On the picture 3.7 SYSTEM SETTINGS，UP/Down shake the joystick,，so that the cursor is pointing to < CLEAR MOTION>，Press FOCUS+，enter CLEARANCE MOTION as picture 3.7.2

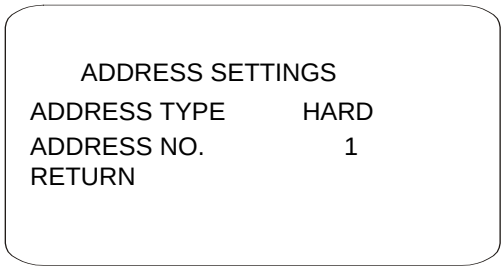


Picture 3.7.2 CLEAR MOTION

<CLEAR MOTION>
CLEAR ALL PRESET：
CLEAR ALL SCAN：
CLEAR ALL TOUR：

5.9 ADDRESS SETTINGS

In the MAIN MENU(picture 3.1), rock the joystick up/down or press the key ZOOM+/ZOOM-, move the arrow to the <ADDRESS SETTINGS >--->, then press the key FOCUS+, enter ADDRESS SETTINGS (picture 3.8)



Picture3.8 ADDRESS SETTINGS

<ADDRESS SETTINGS>
ADDRESS SETTINGS
ADDRESS TYPE：HARD/SOFT：
ADDRESS NO：1~255

Chap.6 Simple fault clearing and maintain

6.1 Simple fault clearing form

Error reports	Problem	Solution
No movement after power on, no image		correction
		Replacement
	connect the wrong power cable	Replacement
	Power supply is damaged	Eliminate
Self test and with image after power on but cannot control	the dome camera address coding, control protocol, baud rate is wrong	re-set the ball machine address coding, control protocol, baud rate
	RS-485 cable connect wrong	Check RS-485 connect cable
The image unstable	Video cable connect not good	Eliminate
	Power is not enough	Replacement
Can control but not smoothly	RS-485 cable connect not good	Check RS-485 connect cable
	One of the RS-485 cable broken	Check RS-485 connect cable

6.2 Notes

1. Careful Transport

Transport, storage and installation process, we need to prevent stress, severe vibration and damage to the product immersion.

2. Do not demolish unauthorized Camera

Do not remove screws or protective cover, there is no repair parts machine. The work should by qualified maintenance people to do it.

3. Be careful installation of dome camera modules

To be especially careful, light up-light down, do not force squeezing movement and the structural components, so as to avoid the dome camera trouble. For security reason, do not cover the housing is not install electricity.

4. Power, video cables and control cables

Power cables, video cables and control cables preferable to use shielded cable and is independent of routing, can not blend together with other lines.

5. Electrical Safety

In use must comply with all electrical safety standards, the ball machine or signal transmission line should work with high-voltage equipment or cables to maintain a sufficient distance (at least 50 meters), if necessary, do a good job against lightning, surge and other protective measures.

6. Cleaning

When cleaning the camera housing, please use the dry soft cloth. Such as severe dirt, please use neutral cleaner gently wipes. Do not use strong or with abrasive cleaner, so as not to scratch jacket, affecting image quality.

7. Please strictly sealed to prevent liquid splashing into the ball machine, otherwise it will result in permanent damage to the device.

8. Do not use the camera when exceed the limits of temperature, humidity. Dome camera use temperature of -25 ℃ to 70 ℃, humidity less than 90%.

9. Do not install the camera near the air-conditioned outlet.

Under such conditions, the lens would be fogging following the state of hydrometer.

- By the opening and closing air-conditioner frequently caused the high and low temperature changed.
- By the opening and closing door frequently caused the high and low temperature changed.
- Make the glasses fogging environment.
- In a room filled with smoke or dust.

10. Do not use the camera toward strong light for long time, such as the sun...

Spotlight and other light will cause screen aging. Use the camera toward to strong light for a long time, may be raised CCD of the color filter damage and loss the true color images.

6.3 After service

Dear users, in order to ensure the full enjoyment of your services, please read the following products and services charter.

(1) Our company supplies the speed dome camera of limited warranty and lifetime maintenance services

1. The warranty period from the date of sale for 12 months, in the warranty period, you will enjoy the product free service, delivered or sent by the user (improper use, man-made causes of failure or an irresistible fault do not belong to the scope of the warranty).

2. After 12 month limited free repairing duration, the products will absorb life time repair with payable services.。

(2) Speed dome camera repair time.

1. Since the customer send the product to our company, 24-hour service.

2. Please advise the related contact first, and then return the product to our company. Otherwise, the product wills not timely maintenance.

Product Warranty Cards

Under this product warranty description to repair the goods. Note that every case of normal use the product itself due to quality problems caused by failures in the warranty period will be given free maintenance.

Warranty Description:

1. This product is free of charge warranty period of one year, during the warranty period any product quality problems occur, so doing the warranty card for free (non-human damage), life-long maintenance.

2. Resulted of improper use or other reasons as well as the failure of products outside the warranty period can be so doing card repair, free of maintenance, only charge the component costs.

3. Product required maintenance should be a copy of this card and the invoice with the product delivery of the Company or the local special maintenance department.

4. Open the machine by personal, tearing up letters labeling, we need to charge the components.

5. Do not repair the machine after the modification or installation of other functions to the product.

The following conditions will not be free:

1. Due to normal wear and tear caused by periodic inspection, maintenance, repair or replacement parts.

2. as the fall, extrusion, soaking, damp, and other man-made damage.

3. Because of flood, fire, lightning and other natural disasters or force majeure of the factors that damage.

4. By non-authorized repair centers repair the machine off.

5. Listed above, if changed please follow the related information.

Model No.	
Manufacturing No.	
Delivery Date	

Company Name	
Customer Name	
Company Address	
Company Tell No	

Maintenance Date	Fault conditions	Maintenance sites	Maintenance result

remarks :